

PHILIPPINE NOTODONTIDAE (LEPIDOPTERA) TAKEN BY
THE ENTOMOLOGICAL SURVEY OF THE JAPAN ENTOMOLOGICAL
ACADEMY IN COOPERATION WITH NANZAN UNIVERSITY AND
SAN CARLOS UNIVERSITY IN 1970*

MASANAO NAKAMURA

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A small collection of Philippine Notodontidae submitted to me for examination contained seven specimens belonging to five species under five genera, and two species preserved in my cabinet were additionally studied on this occasion.

I am indebted to Mr. Ban Tanaka and other members who secured invaluable specimens.

1. *Dudusa nobilis* Walker, ssp. (Fig. 2)

1♀, Amlan, Negros Is., 16 vii 1970 (B. Tanaka leg.).

There are no records of this species hitherto in the Philippines.

The Javanese, Sumatran, Bornean, Celebesese and Formosan representatives of *nobilis* were treated as the subspecies by Roepke (1944) and Okano (1960) on the basis of the male genitalia. However, the superficial differences among them are not always distinct and the locality of the nominate subspecies recorded by Walker is doubtful. Moreover, there is an apprehension that the species allied to *nobilis*, ex. *synopla* Swinhoe**, might have been mixed in aforementioned subspecies.

There is also a possibility that Philippine representative is a different subspecies. Unfortunately the specimen examined by me was only a female and the taxa could not be decided. This specimen resembles the Seitz's figure more than Formosan *baibarana* Matsumura in the followings: forewing, tegula, patagium and thorax more reddish; obscure crescent silvery spot near the base of cell Cu₁ of forewing; yellowish brown dorso-meson band of abdomen absent. However, this specimen is not coincident perfectly with the Seitz's figure in the submarginal area of forewing being suffused with dark reddish brown.

2. *Tarsolepis* (*Tarsolepis*) *sommeri* Hübner (Figs. 3 and 4)

Tarsolepis sommeri: Semper, 1896, Schmett. Philipp. Ins., II: 409 (Luzon and Cebu Is.).

2♀, Talanban, Cebu Is., emerged on 9 viii 1970, reared from larva feeding on leaves of Sapindaceae sp. taken on 20 vii 1970 (B. Tanaka).

3. *Kikuchiana ocularis* Semper **comb. nov.** (Figs. 5 and 16-21)

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***Synopla* Swinhoe has generally been treated as synonymous with *nobilis* Walker but the superficial features of *synopla* are identical with those of *fumosa* Matsumura which inhabits together with *nobilis baibarana* Matsumura in Formosa; then it seems to be concluded that *synopla* is a valid species and *fumosa* (and also *rufobrunnea* Mell from south Kwangtung?) is a subspecies of *synopla*.

Dudusa synopla fumosa Matsumura **comb. nov.**

= *Dudusa fumosa* Matsumura, 1925, Zool. Mag. (Tokyo), 37: 391.

= *Dudusopsis fumosa*: Matsumura, 1929, Ins. Mats., 4: 81.

= *Dudusa nobilis*: Strand (part., nec Walker), 1916, Arch. Naturg., 81A(12): 151.

= *Dudusopsis horishana* Matsumura, 1929, Ins. Mats., 4: 80.

= *Dudusa baibarana horishana*: Gaede, 1930, in Seitz, Grossschmett. Erde, 10: 649.

The discriminative points of *synopla* from *nobilis* are as follows: forewing with postmedian double dentate line bent acutely inwards on vein R₅, while in *nobilis* weakly incurved on vein R₅; without white specks on costa at median and antemedian lines; shaft of antenna dark brown but in *nobilis* black. Genital difference was described by Okano (l.c.).

Stauropus ocularis Semper, 1896, Schmett. Philipp. Ins., II : 413 (Luzon and Bohol Is.).

Pseudofentonia ocularis: Gaede, 1930, in Seitz, Grossschmett. Erde, 10 : 625, t. 82h; Gaede, 1934, in Strand, Lep. Cat., 59 : 22; Kiriakoff, 1968, in Wytsman, Gen. Ins., 217c : 146.

♂ genitalia : uncus robust and quadrate, with a pair of auriform lobes at cephalo-dorsal corners; socius long and curved; tegumen broad at shoulder; valva trigonal, membranous, with sclerotized transverse appendix on which four rising protruded; aedoeagus long and slender, many minute spines on vesica; saccus not produced; fulture superiourus well developed, heavily sclerotized, almost square with two long processes at cephalo-lateral corners, one falciform and another club-like; 8th sternite pentagonal, with two processes at cephalic margin and incised between them.

4. *Quadricalcarifera fasciata tanakai* ssp. nov. (Figs. 1 and 9–15)

♂, expanse 42mm. Differing from nominate subspecies in outer area of forewing being never whitish and from subsp. *viridimaculosa* Matsumura in forewing being never suffused with green scales. Smaller than these two subspecies.

Holotype : ♂, Baguio, Luzon Is., 6 vii 1970 (B. Tanaka leg.), in coll. M. Nakamura.

At this opportunity, I wish to solve the confusion of Formosan *fasciata* and allied species as follows :

Quadricalcarifera fasciata viridimaculosa Matsumura **comb. nov.**

= *Quadricalcarifera viridimaculosa* Matsumura, 1922, Zool. Mag. (Tokyo), 34 : 521 (♀); 1927, J. Coll. Agr. Hokkaido Imp. Univ., 19 : 5, pl. 5, f. 35(♂).

= *Desmeocraera leucophaea* : Matsumura (nec Rothschild), 1934, Ins. Mats., 8 : 176.

= *Desmeocraera fasciatus* var. *umbrosa* : Gaede (nec Matsumura), 1930, in Seitz, Grossschmett. Erde, 10 : 630.

= *Quadricalcarifera fasciata umbrosa* : Kiriakoff (nec Matsumura), 1968, in Wytsman, Gen. Ins., 217 c : 122.

Quadricalcarifera umbrosa Matsumura, 1927, J. Coll. Agr. Hokkaido Imp. Univ., 19 : 6, pl. 1, f. 13.

= *Desmeocraera fasciata* : Matsumura (nec Moore), 1934, Ins. Mats., 8 : 176.

= *Quadricalcarifera viridimaculosa* : Kiriakoff (nec Matsumura), 1968, in Wytsman, Gen. Ins., 217 c : 122.

5. *Calapana basivacua* Walker (Fig. 6)

Pheosia calapana Semper, 1896, Schmett. Philipp. Ins., II : 414 (Mindoro Is.).

1♀, Baguio, Luzon Is., 27 viii 1967 (S. A. Ae leg.); 1♀, Davao, Mindanao Is., 17 i 1971 (K. Sohma leg.).

6. *Gargetta luzonica* Semper (Figs. 7 and 22–24)

Gargetta luzonica Semper, 1896, Schmett. Philipp. Ins., II : 411–412 (Luzon Is.).

Porsica luzonica : Kiriakoff, 1968, in Wytsman, Gen. Ins., 217 c : 27.

2♂♂, Asin Hot Spring, Baguio, Luzon Is., emerged on 25 vii 1970, reared from larva feeding on leaves of *Bridelia glauca* Bl. (Euphorbiaceae) taken on 7 vii 1970 (B. Tanaka).

♂ genitalia : uncus bifurcated at proximal end, both pieces more or less foliate, asymmetrical, possessing many denticles at apex; socii asymmetrical; valva long, abrupt oblique at extremity, sacculus with a club-like process; juxta weakly sclerotized, trigonal; aedoeagus long and broadening gradually toward apex, densely scattered micro denticles near apex, vesica complicated; saccus short; 8th tergite pentagonal; 8th sternite quadrate but concave at caudal margin.

From the genital structure, this species could not be belonging to the genus *Porsica* Walker.

7. *Phalera birmicola* Bryk, ssp.

1♀, near Calinan, Davao, Mindanao Is., 28 v 1971 (K. Sohma leg.). Unrecorded from Philippines.

As the specimen examined by me was worn-out and somewhat deformed, its scientific name could not be decided. However, this specimen resembles the male of *Phalera birmicola* which has been recorded from West Malaysia by me (Nakamura, 1976) in size and superficial appearance. Expanse 90 mm.

It may be a separate species from *birmicola* Bryk.

Literature

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摘 要

昆虫アカデミーフィリピン学術調査によって獲られたシャチホコガ科

南山大学とサン・カルロス大学との協力による昆虫アカデミーフィリピン学術調査によってもたらされたシャチホコガ科は、5種7個体でこれに私の手許にある2種を加え、下記の通り記録した。

1. *Dudusa nobilis* Walker, ssp.
2. *Tarsolepis* (*Tarsolepis*) *sommeri* Hübner.
3. *Kikuchiana ocularis* Semper comb. n. = *Pseudofentonia ocularis* Semper.
4. *Quadricalcarifera fasciata tanakai* ssp. n.
5. *Calapana basivacua* Walker.
6. *Gargetta luzonica* Semper.
7. *Phalera birmicola* Bryk, ssp.

なお、この機会に台湾産のアオシャチホコ属の2種、*fasciata viridimaculosa* Matsumura と *umbrosa* Matsumura との間にある混乱を整理し、シノニムリストを掲げた。

Figs. 1-8. Notodontidae in Philippines : (1) *Quadricalcarifera fasciata tanakai* ssp. nov., ♂ ; (2) *Dudusa nobilis* Walker ssp., ♀ ; (3) *Tarsolepis* (*Tarsolepis*) *sommeri* Hübner, ♀ ; (4) *Kikuchiana ocularis* Semper, ♂ ; (5) *Calapana basivacua* Walker, ♀ ; (6) *Gargetta luzonica* Semper, ♂ ; (7) larva of *Tarsolepis* (*Tarsolepis*) *sommeri* Hübner (photo by Mr. B. Tanaka) ; (8) larva of *Gargetta luzonica* Semper (photo by Mr. B. Tanaka).

Figs. 9-24. ♂ genitalia of Philippine Notodontidae : (9) *Quadricalcarifera fasciata tanakai* ssp. nov. ; (10) do., uncus and socius, lateral view ; (11) do., valva, inner view ; (12) do., aedoeagus, lateral view ; (13) do., apical portion of aedoeagus ; (14) do., 8th sternite ; (15) do., 8th tergite ; (16) *Kikuchiana ocularis* Semper, removed left valva ; (17) do., uncus, dorsal view ; (18) do., valva, inner view ; (19) do., apical portion of aedoeagus, lateral view ; (20) do., 8th sternite ; (21) do., 8th tergite ; (22) *Gargetta luzonica* Semper ; (23) do., 8th sternite ; (24) do., 8th tergite.



